ELSEVIER

Thin Solid Films 339 (1999) 318–319

thin solid films

Author Index of Volume 340

Aarik, J., 110
Abbotto, A., 210
Abdelmalek F., 280
Ahn, J., 62
Aidla, A., 110
Andersen, P., 205
Ando, E., 194
Atanasova, P., 45

Bater, C., 7
Berkova D., 280
Bhushan, B., 225
Bourgeois, S., 175
Bruynseraede, Y., 145
Bøttiger, J., 205

Cai, J., 222
Campbell, J.H., 7
Chae Y.K., 317
Chen, L-Y., 164
Chiang, F.K., 169
Choi, S., 13
Chomat M., 280
Chovelon J.M., 280
Conde, O., 95
Córdova, R., 117
CraigJr., J.H., 7

Dahotre, N.B., 77
Dalchiele, E.A., 117
Davidson, K., 213
de Anda, F., 24
Desu, S.B., 53
Diesner, K., 18
Din, M., 28
Ding, X., 271
D'Olieslaeger, M., 159
Doron, A., 183
Du, Y., 222
Duo, X., 132
Dura, J., 153
Dyrbye, K., 205

Egashira Y., 317
Ennaoui, A., 18

Facchetti, A., 210
Feng, X-S., 265
Fischer, R.A., 274
Foerster, C.E., 201
Fu, Z-W., 164

Gabrielli, G., 210
Gagnaire H., 280
Gao, J., 132
Gauthier, V., 175
Gazecki, J., 233
Gedanken, A., 189
Gibaud, A., 153
Giersig, M., 18
Gómez, H., 117
Gould, R.D., 28
Graat, P.C.J., 87
Gu, G., 222
Gu, S., 45
Guo, X.J., 169

Hajek, V., 33
Hampden-Smith, M.J., 45
He, S., 140
Hedborg, E., 250
Hernández del Castillo, I.C., 24
Hishinuma, M., 72
Homma, T., 237
Huang, J., 132, 137
Huang, N-X., 257

Iwamura, E., 306

Jaffrezic-Renault N., 280
Ji, Q.X., 140
Jiang, D., 271
Jiang, L., 262
Johnson, C.M., 233
Jones, R., 213
Joselevich, E., 183
Joshi, P.C., 53

Käshammer, J., 274
Kasik I., 280
Kataby, G., 189
Kiisler, A.-A., 110
Kim, E-H., 13
Ko, D-H., 13
Kodas, T.T., 45
Komiyama H., 317
Kozuka, H., 125
Krier, A., 213
Kubica, J.M., 233
Kuku, A., 292
Kutsuzawa, Y., 237
Kuzik, L.A., 288

Lairson, B.M., 40
Lacroix M., 280
Lee, C., 242
Lee, H-D., 13
Lepienski, C.M., 201
Li, B., 262
Li, F.X., 140
Li, W., 68
Li, X., 225
Lin, C., 132, 137
Lin, H., 125
Liu, H-G., 265
Liu, W., 106
Liu, X.W., 169
Liu, X-D., 68
Liu, Z-G., 68
Lokhande, C.D., 18
Lu, A., 271
Lu, F., 68
Lu, J., 106
Lu, P., 140
Lundström, I., 250

Maaza, M., 153
Mae, K., 145
Maglione, M., 175
Martinu, L., 33
Matejec V., 280
Matsuzaki, Y., 72
McCay, M.H., 77
Mishurnyi, V.A., 24
Mittemeijer, E.J., 87
Mittler-Nehera, S., 27
Montiel-Sánchez, H., 301
Morjan, I., 95
Moshchalkov, V.V., 145
Moske, M., 205
Muller, M., 18

No, K., 242

Oliveira, M., 95
Ong, P.P., 222
Onishi, T., 306
Östling, M 137
Otsuka, N., 237
Ouyang, J-M., 257

Pagani, G.A., 210
Park, H.L., 297
Patil, P.S., 18
Patil, R S., 11
Prozorov, R., 189
Prozorov, T., 189

Qin, Q-Z., 164
Quaeyhaegens, C., 159

Ramesham, R., 1
Rats, D., 33
Reeves, G.K., 233
Reguera, E., 301
Ricceri, R., 210
Ridgway, M.C., 233
Rusli, X., 62
Ryu, S.O., 53

Sacilotti, M., 175
Sánchez-Sinencio, F., 301
Sammelselg, V., 110
Satija, S.K., 153
Scheumann, V., 274
Schlittner, A., 183
Schmit, J.-P.N., 213
Schouterden, K., 40
Schrebler, R., 117
Scorzelli, R.B., 301
Sella, C., 153
Semak, V., 77
Serbena, F.C., 201
Shen, Q., 137
Shih, H.C., 169
Shimogaki Y., 317
Sibillot, P., 175

0040-6090/99/$ - see front matter © 1999 Elsevier Science S.A. All rights reserved.
PII: S0040-6090(99)00091-7

Somers, M.A.J., 87
Song, H., 242
Spirin, V., 242
Stals, L., 159
Sugawara K., 317
Sundgren, H., 250
Sung, L., 153
Sung, S.L., 169
Suzuki, S., 194

Tai, Z-H., 257
Takagi, K., 306
Takahashi, M., 125
Tan, C-Y., 68
Tirumala, S., 53
Tributsch, H., 18
Tseng, C.H., 169

Ugarte, R., 117
Uustare, T., 110

Vandevelde, T., 159
Vasiliu, F., 95
Vlekken, J., 159

Wang, F-X., 68
Wang, K-M., 68
Wang, L., 137, 265
Watt, F., 62
Weiβ, J., 274
Willner, I., 183
Winquist, F., 250
Winter, C., 274
Wohlfart, P., 274
Wu, T.D., 159

Xiao, C., 77
Xu, H., 271
Xue, Q., 106
Xue, Q.-B., 265

Yakovlev, V.A., 288
Yamaguchi, M., 237
Yan, R., 132
Yang, C.Y., 62
Yang, H., 62
Yang, K-Z., 265
Yang, L., 132
Yang, S., 222
Yang, W., 222
Yasuda, I., 72
Yee-Madeira, H., 301
Yoko, T., 125
Yoo, B-Y., 13
Yoon, I.T., 297
Yoon, S.F., 62
Yu., Gorbatchev, A., 24
Yuan, L., 262

Zamora, M., 233
Zawadzka, J., 213
Zawislak, F.C., 201
Zelaya-Angel, O., 301
Zhang, J., 106
Zhang, L., 271
Zhang, Q., 62
Zhao, G., 125
Zheng, L., 132
Zheng, W-J., 257
Zhu, Y., 68

ELSEVIER

Thin Solid Films 340 (1999) 320–325

thin solid films

Subject Index of Volume 340

Adhesion
Micro-scratch analysis and mechanical properties of plasma-deposited silicon-based coatings on polymer substrates, 33
Adhesion strength
Abrasion of thin films deposited onto glass by the Taber test, 194
Aliphatic hydrocarbon
Consequences of TiO_2 doping on the optical properties of porous silica layers coated on silica optical fibers, 280
Alloys
On the interpretation of ^{57}Fe Mössbauer spectra from CdTe thin films with substitutions of Fe, In, and Sb, 301
Aluminum nitride
Preparation of AlN thin films by nitridation of Al-coated Si substrate, 137
Aluminum oxide
Effect of a noble metal coating on a natural aluminum oxide film, 288
Aluminum
Morphology of sputter deposited Al alloy films, 306
Amorphous carbon nitride
A novel approach to the formation of amorphous carbon nitride film on silicon by ECR-CVD, 169
Amorphous films
Stress formation and relaxation in amorphous Ta–Cr films, 205
Amorphous interlayer
Microstructure analyses of the titanium films formed by the ionized sputtering process, 13
Anisotropy
The anisotropic gas response behavior of LB films of an amphiphilic asymmetrically substituted phthalocyanine, 271
Annealing
Refractive indices and thicknesses of optical waveguides fabricated by silicon ion implantation into silica glass, 233
AP-MOCVD
Growth and characterization of AP-MOCVD iron doped titanium dioxide thin films, 175
Aromatic hydrocarbon
Consequences of TiO_2 doping on the optical properties of porous silica layers coated on silica optical fibers, 280
Atomic force microscopy
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183
Atomic layer growth
Influence of substrate temperature on atomic layer growth and properties of HfO_2 thin films, 110
Au-nanoparticles
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183

Bacteriorhodopsin
Photoelectric responses of Langmuir–Blodgett film containing bacteriorhodopsin on ITO modified with polypyrrole film, 262
Beams
Fabrication of diamond microstructures for microelectromechanical systems (MEMS) by a surface micromachining process, 1
Bismuth
Fabrication and characterization of $(1-x)SrBi_2Ta_2O_9$–xBi_3TaTiO_9 layered structure solid solution thin films for ferroelectric random access memory (FRAM) applications, 53
Bragg diffraction
Intensity profiles along the RHEED streaks for various thin film surface morphologies, 145
Brewster angle microscopy (BAM)
Central metal effect on the organization of porphyrin LB films, 265
Bridges
Fabrication of diamond microstructures for microelectromechanical systems (MEMS) by a surface micromachining process, 1
Buffer layer
Non-vacuum laser deposition of buffer layers for coated conductors, 77

C–B–N
Structural characterization of $C_xB_yN_z$ ($x = 0.1$ to $x = 0.2$) layers obtained by laser-driven synthesis, 95
Cadmium arsenide
Field-lowering carrier excitation in cadmium arsenide thin films, 28
Cantilever beams
Fabrication of diamond microstructures for microelectromechanical systems (MEMS) by a surface micromachining process, 1
Carbon
Anisotropy in wear processes measured by scanning probe microscopy, 40

0040-6090/99/$ - see front matter © 1999 Elsevier Science S.A. All rights reserved.
PII: S0040-6090(99)000092-9

Deposition of polymeric nitrogenated amorphous carbon films (a-C:H:N) using electron cyclotron resonance CVD, 62
Ceramic-metal
Neutron and X-ray reflectivity analysis of ceramic-metal materials, 153
CH_4
Separation of CO_2 and CH_4 through two types of polyimide membrane, 106
Charge migration
Charge migration on hydrophobic and hydrophilic silicon dioxide, 250
Chemical vapor deposition
Chemical vapor deposition of copper–cobalt binary films, 45
Structural characterization of $C_xB_yN_z$ ($x = 0.1$ to $x = 0.2$) layers obtained by laser-driven synthesis, 95
Correlation between the OES plasma composition and the diamond film properties during microwave PA-CVD with nitrogen addition, 159
Selective ultrathin gold deposition by organometallic chemical vapor deposition onto organic self-assembled monolayers (SAMs), 274
Chemisorption
H^- ESD observed from β-state NH_3 adsorbed on Pt(111), 7
Chromium
Stress formation and relaxation in amorphous Ta–Cr films, 205
CO_2
Separation of CO_2 and CH_4 through two types of polyimide membrane, 106
Coatings
Effect of surfactant concentration on the size of coated ferromagnetic nanoparticles, 189
Coefficient of friction
Abrasion of thin films deposited onto glass by the Taber test, 194
Coercive field
Total dose radiation effects of $Au/PbZr_{0.52}Ti_{0.48}O_3/YBa_2Cu_3O_{7-}\delta$ capacitors, 132
Collimated sputtering
Microstructure analyses of the titanium films formed by the ionized sputtering process, 13
Colloid
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183
Composite film
Photoelectric responses of Langmuir–Blodgett film containing bacteriorhodopsin on ITO modified with polypyrrole film, 262
Conductivity
The anisotropic gas response behavior of LB films of an amphiphilic asymmetrically substituted phthalocyanine, 271
Ion transport studies on vacuum deposited $PbSnI_4$ thin films, 292
Copper–cobalt films
Chemical vapor deposition of copper–cobalt binary films, 45
DC conductivity
Conductivity mechanisms in poly(*p*-phenylene vinylene) light-emitting diodes at high and low bias , 213
Deposition process
Chemical bath deposition of indium sulphide thin films: preparation and characterization, 18
Fabrication and characterization of $(1-x)SrBi_2Ta_2O_9$–xBi_3TaTiO_9 layered structure solid solution thin films for ferroelectric random access memory (FRAM) applications, 53
Epitaxial growth of RuO_2 thin films by metal-organic chemical vapor deposition, 140
Depth profiling
Quantitative analysis of the oxygen content in $BaTiO_3$ films deposited by PLD using $^{16}O(\alpha,\alpha)^{16}O$ resonant elastic scattering, 68
Diamond
Fabrication of diamond microstructures for microelectromechanical systems (MEMS) by a surface micromachining process, 1
Correlation between the OES plasma composition and the diamond film properties during microwave PA-CVD with nitrogen addition, 159
Dielectric constant
Total dose radiation effects of $Au/PbZr_{0.52}Ti_{0.48}O_3/YBa_2Cu_3O_{7-}\delta$ capacitors, 132
Dielectric properties
Electrical characterization of Ta_2O_5 films deposited by laser reactive ablation of metallic Ta, 164
Electrical stability of polyimide siloxane films for interlayer dielectrics in multilevel interconnections, 237
Doping
Growth and characterization of AP-MOCVD iron doped titanium dioxide thin films, 175

Elastic properties
Morphology of sputter deposited Al alloy films, 306
Electrical properties
Field-lowering carrier excitation in cadmium arsenide thin films, 28
Electrical characterization of Ta_2O_5 films deposited by laser reactive ablation of metallic Ta, 164
Ion transport studies on vacuum deposited $PbSnI_4$ thin films, 292
Electrical properties and measurements
Fabrication and characterization of $(1-x)SrBi_2Ta_2O_9$–xBi_3TaTiO_9 layered structure solid solution thin films for ferroelectric random access memory (FRAM) applications, 53
Drying temperature effects on microstructure, electrical properties and electro-optic coefficients of sol-gel derived PZT thin films, 242
Electrochemical deposition
Electrodeposition of $CuInSe_2$ thin films in a glycine acid medium, 117
Electrochemistry
Effect of a noble metal coating on a natural aluminum oxide film, 288
Electron-cyclotron-resonance chemical vapor deposition

A novel approach to the formation of amorphous carbon nitride film on silicon by ECR-CVD, 169
Electron-stimulated desorption
H⁻ ESD observed from β-state NH_3 adsorbed on Pt(111), 7
Ellipsometry
Ellipsometric analysis of the oxidation of α−Fe and ε-Fe_2N_{1-x}, 87
Epitaxial growth
Epitaxial growth of RuO_2 thin films by metal-organic chemical vapor deposition, 140
Etching
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183

Ferroelectric properties
Fabrication and characterization of $(1-x)SrBi_2Ta_2O_9$–xBi_3TaTiO_9 layered structure solid solution thin films for ferroelectric random access memory (FRAM) applications, 53
Drying temperature effects on microstructure, electrical properties and electro-optic coefficients of sol-gel derived PZT thin films, 242
Films
Growth of yttria stabilized zirconia thin films by metallo-organic, ultrasonic spray pyrolysis, 72
Fluorine doped tin oxide
Electrosynthesis of the molybdenum disulphide thin films and characterization, 11
Fourier transform infrared spectroscopy
Deposition of polymeric nitrogenated amorphous carbon films (a-C:H:N) using electron cyclotron resonance CVD, 62
Friction
Anisotropy in wear processes measured by scanning probe microscopy, 40
Fullerenes
Ion irradiation hardening of C_{60} thin films, 201
Functionalized self-assembled monolayers
Selective ultrathin gold deposition by organometallic chemical vapor deposition onto organic self-assembled monolayers (SAMs), 274

Gold
Selective ultrathin gold deposition by organometallic chemical vapor deposition onto organic self-assembled monolayers (SAMs), 274
Gradient bandgap
Preparation and photoelectrochemical properties of $Ti_{1-x}V_xO_2$ solid solution thin film photoelectrodes with gradient bandgap, 125

Hafnium
Influence of substrate temperature on atomic layer growth and properties of HfO_2 thin films, 110
H-aggregate
Information storage based on photochemical effects in mixed Langmuir–Blodgett films, 210
Halides
Ion transport studies on vacuum deposited $PbSnI_4$ thin films, 292
Hall effect
Transport property of Sn-doped $In_{0.5}Ga_{0.5}P$ layers grown by liquid phase epitaxy, 297
Hardness
Micro-scratch analysis and mechanical properties of plasma-deposited silicon-based coatings on polymer substrates, 33
Abrasion of thin films deposited onto glass by the Taber test, 194
Ion irradiation hardening of C_{60} thin films, 201
8-hydroxyquinoline derivatives
X-ray photoelectron spectroscopy study of Langmuir–Blodgett films of *N*-octadecyl-8-hydroxy-2-quinoline carboxamide deposited from subphases containing metal ions, 257
Hydrogen and deuterium
H⁻ ESD observed from β-state NH_3 adsorbed on Pt(111), 7
Hydrophilic surfaces
Charge migration on hydrophobic and hydrophilic silicon dioxide, 250

Impurities
Transport property of Sn-doped $In_{0.5}Ga_{0.5}P$ layers grown by liquid phase epitaxy, 297
In–P
Temperature determination by solubility measurements and a study of evaporation of volatile components in LPE, 24
Ion implantation
Ion irradiation hardening of C_{60} thin films, 201
Refractive indices and thicknesses of optical waveguides fabricated by silicon ion implantation into silica glass, 233
Ionized sputtering process
Microstructure analyses of the titanium films formed by the ionized sputtering process, 13
Iron
Ellipsometric analysis of the oxidation of α−Fe and ε-Fe_2N_{1-x}, 87
Growth and characterization of AP-MOCVD iron doped titanium dioxide thin films, 175
Iron oxide
Effect of surfactant concentration on the size of coated ferromagnetic nanoparticles, 189
Irradiation
Total dose radiation effects of $Au/PbZr_{0.52}Ti_{0.48}O_3/YBa_2Cu_3O_{7-}\delta$ capacitors, 132

Langmuir–Blodgett (LB) film
X-ray photoelectron spectroscopy study of Langmuir–Blodgett films of *N*-octadecyl-8-hydroxy-2-quinoline carboxamide deposited from subphases containing metal ions, 257
Information storage based on photochemical effects in mixed Langmuir–Blodgett films, 210
Photoelectric responses of Langmuir–Blodgett film containing bacteriorhodopsin on ITO modified with polypyrrole film, 262

Central metal effect on the organization of porphyrin LB films, 265
The anisotropic gas response behavior of LB films of an amphiphilic asymmetrically substituted phthalocyanine, 271
Laser
Non-vacuum laser deposition of buffer layers for coated conductors, 77
Laser-driven synthesis
Structural characterization of $C_xB_yN_z$ ($x = 0.1$ to $x = 0.2$) layers obtained by laser-driven synthesis, 95
Lead oxide
Drying temperature effects on microstructure, electrical properties and electro-optic coefficients of sol-gel derived PZT thin films, 242
Light emitting diode
Conductivity mechanisms in poly(*p*-phenylene vinylene) light-emitting diodes at high and low bias , 213
Liquid phase epitaxy
Temperature determination by solubility measurements and a study of evaporation of volatile components in LPE, 24
Transport property of Sn-doped $In_{0.5}Ga_{0.5}P$ layers grown by liquid phase epitaxy, 297
Luminescence
Enhanced luminescence of silica thin films co-doped with Er^{3+} and Yb^{3+}, 222

Mössbauer spectra
On the interpretation of ^{57}Fe Mössbauer spectra from CdTe thin films with substitutions of Fe, In, and Sb, 301
Magnetic properties and measurements
Effect of surfactant concentration on the size of coated ferromagnetic nanoparticles, 189
Membranes
Separation of CO_2 and CH_4 through two types of polyimide membrane, 106
Metal ions
X-ray photoelectron spectroscopy study of Langmuir–Blodgett films of *N*-octadecyl-8-hydroxy-2-quinoline carboxamide deposited from subphases containing metal ions, 257
Metal-organic chemical vapor deposition
Epitaxial growth of RuO_2 thin films by metal-organic chemical vapor deposition, 140
Micro/nanomechanical and tribological properties
Micro/nanomechanical characterization of ceramic films for microdevices, 225
Microelectromechanical systems (MEMS)
Micro/nanomechanical characterization of ceramic films for microdevices, 225
Micro-scratch analysis
Micro-scratch analysis and mechanical properties of plasma-deposited silicon-based coatings on polymer substrates, 33
Microstructures
Fabrication of diamond microstructures for microelectromechanical systems (MEMS) by a surface micromachining process, 1
Microstructure analyses of the titanium films formed by the ionized sputtering process, 13
Molybdenum disulphide
Electrosynthesis of the molybdenum disulphide thin films and characterization, 11
Monolayer
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183
Monolayers
Central metal effect on the organization of porphyrin LB films, 265
Multifrequency optical data storage
Information storage based on photochemical effects in mixed Langmuir–Blodgett films, 210

Nanochemistry
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183
Nanoindentation
Ion irradiation hardening of C_{60} thin films, 201
Nanostructures
Effect of surfactant concentration on the size of coated ferromagnetic nanoparticles, 189
Nickel
Non-vacuum laser deposition of buffer layers for coated conductors, 77
Nitridation
Preparation of AlN thin films by nitridation of Al-coated Si substrate, 137
Nitrides
Ellipsometric analysis of the oxidation of $\alpha-Fe$ and ε-Fe_2N_{1-x}, 87
Nitrogen
Deposition of polymeric nitrogenated amorphous carbon films (a-C:H:N) using electron cyclotron resonance CVD, 62
Correlation between the OES plasma composition and the diamond film properties during microwave PA-CVD with nitrogen addition, 159
Nitrogen dioxide
The anisotropic gas response behavior of LB films of an amphiphilic asymmetrically substituted phthalocyanine, 271

OES
Correlation between the OES plasma composition and the diamond film properties during microwave PA-CVD with nitrogen addition, 159
Optical properties
Chemical bath deposition of indium sulphide thin films: preparation and characterization, 18
Refractive indices and thicknesses of optical waveguides fabricated by silicon ion implantation into silica glass, 233
Electrical stability of polyimide siloxane films for interlayer dielectrics in multilevel interconnections, 237
Optoelectronic devices
Drying temperature effects on microstructure, electrical properties and electro-optic coefficients of sol-gel derived PZT thin films, 242

Overcoat
Anisotropy in wear processes measured by scanning probe microscopy, 40
Oxidation
Ellipsometric analysis of the oxidation of $\alpha-Fe$ and ε-Fe_2N_{1-x}, 87
Oxides
Influence of substrate temperature on atomic layer growth and properties of HfO_2 thin films, 110
Oxygen concentration
Quantitative analysis of the oxygen content in $BaTiO_3$ films deposited by PLD using $^{16}O(\alpha,\alpha)^{16}O$ resonant elastic scattering, 68

Photobleaching
Information storage based on photochemical effects in mixed Langmuir–Blodgett films, 210
Photocurrent
Photoelectric responses of Langmuir–Blodgett film containing bacteriorhodopsin on ITO modified with polypyrrole film, 262
Photoelectrochemical properties
Preparation and photoelectrochemical properties of $Ti_{1-x}V_xO_2$ solid solution thin film photoelectrodes with gradient bandgap, 125
Photoelectrochemistry
Electrodeposition of $CuInSe_2$ thin films in a glycine acid medium, 117
Plasma enhanced chemical vapor deposition
Micro-scratch analysis and mechanical properties of plasma-deposited silicon-based coatings on polymer substrates, 33
Platinum
H^- ESD observed from β-state NH_3 adsorbed on Pt(111), 7
Neutron and X-ray reflectivity analysis of ceramic-metal materials, 153
Poly(*p*-phenylene vinylene)
Conductivity mechanisms in poly(*p*-phenylene vinylene) light-emitting diodes at high and low bias , 213
Polyimide
Separation of CO_2 and CH_4 through two types of polyimide membrane, 106
Polymers
Micro-scratch analysis and mechanical properties of plasma-deposited silicon-based coatings on polymer substrates, 33
Electrical stability of polyimide siloxane films for interlayer dielectrics in multilevel interconnections, 237
Polypyrrole
Photoelectric responses of Langmuir–Blodgett film containing bacteriorhodopsin on ITO modified with polypyrrole film, 262
Polysilicon films
Micro/nanomechanical characterization of ceramic films for microdevices, 225
Porous silica
Consequences of TiO_2 doping on the optical properties of porous silica layers coated on silica optical fibers, 280
Porphyrin
Central metal effect on the organization of porphyrin LB films, 265
Pulsed laser deposition
Quantitative analysis of the oxygen content in $BaTiO_3$ films deposited by PLD using $^{16}O(\alpha,\alpha)^{16}O$ resonant elastic scattering, 68
Electrical characterization of Ta_2O_5 films deposited by laser reactive ablation of metallic Ta, 164

Raman
Correlation between the OES plasma composition and the diamond film properties during microwave PA-CVD with nitrogen addition, 159
Raman scattering
Enhanced luminescence of silica thin films co-doped with Er^{3+} and Yb^{3+}, 222
Reflection high-energy electron diffraction
Intensity profiles along the RHEED streaks for various thin film surface morphologies, 145
Reflection spectroscopy
Effect of a noble metal coating on a natural aluminum oxide film., 288
Retained polarization
Total dose radiation effects of $Au/PbZr_{0.52}Ti_{0.48}O_3/YBa_2Cu_3O_{7-}\delta$ capacitors, 132
Roughness
Intensity profiles along the RHEED streaks for various thin film surface morphologies, 145
Ruthenium oxide
Epitaxial growth of RuO_2 thin films by metal-organic chemical vapor deposition, 140
Rutherford backscattering spectroscopy
Quantitative analysis of the oxygen content in $BaTiO_3$ films deposited by PLD using $^{16}O(\alpha,\alpha)^{16}O$ resonant elastic scattering, 68

Schottky barrier
Electrical stability of polyimide siloxane films for interlayer dielectrics in multilevel interconnections, 237
Secondary ion mass spectrometry
Correlation between the OES plasma composition and the diamond film properties during microwave PA-CVD with nitrogen addition, 159
Selective deposition
Fabrication of diamond microstructures for microelectromechanical systems (MEMS) by a surface micromachining process, 1
Semiconductors
Electrodeposition of $CuInSe_2$ thin films in a glycine acid medium, 117
Semiconductors
Transport property of Sn-doped $In_{0.5}Ga_{0.5}P$ layers grown by liquid phase epitaxy, 297
On the interpretation of ^{57}Fe Mössbauer spectra from CdTe thin films with substitutions of Fe, In, and Sb, 301
Separation
Separation of CO_2 and CH_4 through two types of polyimide membrane, 106
Silica optical fiber

Consequences of TiO_2 doping on the optical properties of porous silica layers coated on silica optical fibers, 280
Silicon
A novel approach to the formation of amorphous carbon nitride film on silicon by ECR-CVD, 169
Silicon carbide films
Micro/nanomechanical characterization of ceramic films for microdevices, 225
Silicon dioxide
Charge migration on hydrophobic and hydrophilic silicon dioxide, 250
Silicon oxide
Enhanced luminescence of silica thin films co-doped with Er^{3+} and Yb^{3+}, 222
Silicon oxide
Refractive indices and thicknesses of optical waveguides fabricated by silicon ion implantation into silica glass, 233
Silver
Effect of a noble metal coating on a natural aluminum oxide film., 288
Solid electrolyte interface
Ion transport studies on vacuum deposited $PbSnI_4$ thin films, 292
Spray pyrolysis
Growth of yttria stabilized zirconia thin films by metallo-organic, ultrasonic spray pyrolysis, 72
Sputtering
Enhanced luminescence of silica thin films co-doped with Er^{3+} and Yb^{3+}, 222
On the interpretation of ^{57}Fe Mössbauer spectra from CdTe thin films with substitutions of Fe, In, and Sb, 301
Morphology of sputter deposited Al alloy films, 306
Stoichiometry
Chemical vapor deposition of copper–cobalt binary films, 45
Stress
Stress formation and relaxation in amorphous Ta–Cr films, 205
Morphology of sputter deposited Al alloy films, 306s
Structural properties
Chemical bath deposition of indium sulphide thin films: preparation and characterization, 18
Sulphides
Chemical bath deposition of indium sulphide thin films: preparation and characterization, 18
Superconductivity
Non-vacuum laser deposition of buffer layers for coated conductors, 77
Surface chemistry
Selective ultrathin gold deposition by organometallic chemical vapor deposition onto organic self-assembled monolayers (SAMs), 274
Surface morphology
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183
Surface roughness
AFM characterization of the structure of Au-colloid monolayers and their chemical etching, 183
Taber abrasion test
Abrasion of thin films deposited onto glass by the Taber test, 194
Tantalum
Stress formation and relaxation in amorphous Ta–Cr films, 205
Tantalum oxide
Electrical characterization of Ta_2O_5 films deposited by laser reactive ablation of metallic Ta, 164
Temperature measurements
Temperature determination by solubility measurements and a study of evaporation of volatile components in LPE, 24
Thin film surface morphology
Intensity profiles along the RHEED streaks for various thin film surface morphologies, 145
Thin film
Microstructure analyses of the titanium films formed by the ionized sputtering process, 13
Preparation of AlN thin films by nitridation of Al-coated Si substrate, 137
Epitaxial growth of RuO_2 thin films by metal-organic chemical vapor deposition, 140
Ion irradiation hardening of C_{60} thin films, 201
Titanium
Preparation and photoelectrochemical properties of $Ti_{1-x}V_xO_2$ solid solution thin film photoelectrodes with gradient bandgap, 125
Titanium oxide
Growth and characterization of AP-MOCVD iron doped titanium dioxide thin films, 175

Wear
Anisotropy in wear processes measured by scanning probe microscopy, 40

X-ray diffraction
Electrosynthesis of the molybdenum disulphide thin films and characterization, 11
Electrodeposition of $CuInSe_2$ thin films in a glycine acid medium, 117
A novel approach to the formation of amorphous carbon nitride film on silicon by ECR-CVD, 169
X-ray photoelectron spectroscopy
X-ray photoelectron spectroscopy study of Langmuir–Blodgett films of *N*-octadecyl-8-hydroxy-2-quinoline carboxamide deposited from subphases containing metal ions, 257
X-ray reflectivity
Neutron and X-ray reflectivity analysis of ceramic-metal materials, 153
X-ray scattering
Neutron and X-ray reflectivity analysis of ceramic-metal materials, 153

YSZ
Growth of yttria stabilized zirconia thin films by metallo-organic, ultrasonic spray pyrolysis, 72